

OFFICE MEMORANDUM

DATE: May 18, 1999

TO: Region Engineer

Associate Region Engineer - Delivery Region Materials Engineers/Supervisors

Region Construction Engineers

Region Office Engineers

TSC Managers

Delivery/Project Engineers

FROM: C. Thomas Maki

Chief Operations Officer

Gary D. Taylor

Chief Engineer/Deputy Director

Bureau of Highway Technical Services

SUBJECT: Bureau of Highway Instructional Memorandum 1999-9

Revisions to MDOT Resident/Delivery/Project Engineer Project Record

Certification

This instructional memorandum supersedes the resident/project engineer certification requirements as stated in the Joint Construction and Materials and Technology Construction IM 1997-A. The revised procedures are attached. The changes were requested by the region engineers who believe the 12-month experience as a resident/project engineer requirement is arbitrary and adds no value in determining the engineer's ability to manage a project. Members of the team agreed it was more important to look at the size of the projects, as well as the types of work items available for review.

The Transtip Team, whose re-engineered process resulted in the original IM 1997-A, met with staff from FHWA and Commission Audit and received their concurrence to eliminate the 12 month minimum requirement. The team also took this opportunity to make the following changes to the procedure:

- Make changes to reflect MDOT's organizational changes.
- Address the method for dealing with final estimates when the engineer who starts the project is not the one to complete it.
- Increase the time engineers are given to address deficiencies from the current two weeks to 30 days.

- Added the statement "and the items selected will have significant monetary value." to the third sentence of the last paragraph on page one of the procedure.
- Removed the construction staff engineer 15 or equivalent from the review team.
- Replaced the region office engineer with region representative.
- Added the region engineer to the review and approval process.

C. Thomas Maki

Chief Operation Officer

Gary D. Taylor, Chief Engineer/Deputy Director Bureau of Highway Technical Services

Attachments

BOHTS:C&T:GCT:aw:jp

Subject Index: Operations Reviews

cc: Lansing C&T Division Engineers FHWA, J. Steele

Lansing C&T Division Technicians MAPA
Real Estate Division, M. Frierson MCPA
Design Division, P. Miller MCA
G. D. Taylor MAA
B. Jay MRBA
T. Maki AUC

OEO, A. Suber V. Blaxton J. Reincke K. Trentham R. Endres R. Knapp S. Kulkarni T. Hynes J. Klee G. Mayes P. Rang P. O'Rourke J. Ruszkowski D. Smiley S. Kulkarni J. Staton J. Klee R. Till

S. Cook

RESIDENT/PROJECT ENGINEER CERTIFICATION PROGRAM

Minimum requirements are as follows:

- ! A minimum of two projects must be completed and accepted
- ! Participation in Project Administration Training For Newly Appointed or Non-Certified Engineers (i.e., Office Tech School)
- ! Recommendation by the Region for Certification

A Certification Review Team will be established. The Team's responsibility will be for certification review of all Resident/Project Engineers, project records and subsequent recommendation for the certification to the Engineer of Construction and the Region Engineer. The team will consist of three team members:

- ! Construction Tech 12
- ! Materials Tech 12
- ! Region Representative

Process Requirements Are as Follows:

When the eligibility criteria has been met, the Region will notify the Engineer of Construction in writing the name of the engineer recommended for certification. For local governments, the engineer and agency shall be stated.

The certification review team will notify the engineer to be certified and set up the time and date for the review.

The review team will review a minimum of two projects. The minimum number of contract items to be reviewed will be 15. The selection ratio will be ten final and five interim items, and the items selected will have significant monetary value. The items selected will be based on methods of measurement such as volume, weight, length, area, unit, etc. It will be mandatory that major items such as Earthwork, Bituminous, Concrete, and Aggregate Surfaces be reviewed and, when applicable, that one force account item be reviewed. Also, the supporting documentation for any approved extensions of time which support extensions without liquidated damages will also be reviewed. For the selected items, the project and material documentation will be reviewed to see that they meet the required specifications and that appropriate approvals for materials or specification changes are in place. In addition, the review team will review Recommendations/Authorizations for extras approved by the Region Engineer, TSC Manager, or Resident Engineer to determine that the format or the explanation is consistent with the Construction

Manual and Construction Instructional Memoranda.

Review of certified payrolls is not a requirement by the review team, but the Resident/Project Office <u>must</u> continue to review and keep copies of weekly certified payrolls as part of the required project documentation.

Local Agency Engineers must be an employee(s) of the Local Government Agency and must comply with the above. They shall have a minimum of two projects completed and accepted and must be recommended for certification by the Region. The certification shall be for a period of two years.

Upon completion of the review, the review team will meet with the Resident/Project Engineer to discuss their findings. If review deficiencies are found by the review team, the engineer will be given 30 days to address any deficiencies. After the review team has been notified that the deficient items have been addressed, a follow-up review will be conducted.

The revised project record certification (Form 1117) will require an abbreviated response from the review team indicating that proper documentation was used, that measurements were according to specifications, that documents were signed and dated, that documentation was identified to the project, and that all testing and acceptance of materials used were within specifications.

This will be indicated as a simple P or F (pass or fail) or NA (not applicable). Eighty percent (80%) of the boxes for each criteria (measurement per specification, proper testing and test documents and prescribed forms completed, signed and dated) checked on Form 1117 **must** indicate a passing grade (P) in order to certify a Resident/Project Engineer.

Upon completion of the review, the review team will make its recommendation to certify or not certify to the Engineer of Construction and the Region Engineer.

If the Resident/Project Engineer does not meet this criteria, or if he/she meets the criteria but the failing grades (F) are of major concern to the Engineer of Construction and the Region Engineer, the Resident/Project Engineer will not be certified and all of his/her projects will be reviewed by the Region Review Team for a period of one year. If the Region feels the Resident/Project Engineer has met the certification criteria after this period of time, they will recommend in writing to the Engineer of Construction and the Region Engineer that the Resident/Project Engineer be reviewed again for certification.

After approval by the Engineer of Construction, the Resident/Project Engineer and the Region will be notified in writing. The MDOT Resident/Project Engineer will be certified for three years and the local agency project engineer will be certified for two years to submit final estimates without further review.

If there is a project Engineer change before the project is closed out, the final estimate will be submitted under the engineer who had completed the majority of the work on the project. The Region Engineer or TSC Manager must notify the Region Support Unit in writing, that this was the case.